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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/848,095      | 05/03/2001  | Jay M. Short         | DIVER1280-10        | 7088             |

7590 05/09/2003

Lisa A. Haile, Ph.D.  
GRAY CARY WARE & FREIDENRICH LLP  
Suite 1100  
4365 Executive Drive  
San Diego, CA 92121-2189

[REDACTED] EXAMINER

KETTER, JAMES S

| ART UNIT | PAPER NUMBER |
|----------|--------------|
| 1636     | (Signature)  |

DATE MAILED: 05/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.



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| APPLICATION NO./<br>CONTROL NO. | FILING DATE | FIRST NAMED INVENTOR /<br>PATENT IN REEXAMINATION | ATTORNEY DOCKET NO. |
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EXAMINER

ART UNIT PAPER

17

DATE MAILED:

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Commissioner for Patents

--See attached--

|                        |                               |                              |
|------------------------|-------------------------------|------------------------------|
| <b>Advisory Action</b> | Application No.<br>09/848,095 | Applicant(s)<br>SHORT ET AL. |
|                        | Examiner<br>James S. Ketter   | Art Unit<br>1636             |

*Note: the MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

THE REPLY FILED 25 April 2003 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

**PERIOD FOR REPLY [check either a) or b])**

a)  The period for reply expires 6 months from the mailing date of the final rejection.

b)  The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1.  A Notice of Appeal was filed on \_\_\_\_\_. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.

2.  The proposed amendment(s) will not be entered because:

- (a)  they raise new issues that would require further consideration and/or search (see NOTE below);
- (b)  they raise the issue of new matter (see Note below);
- (c)  they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
- (d)  they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_.

3.  Applicant's reply has overcome the following rejection(s): See Continuation Sheet.

4.  Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

5.  The a) affidavit, b) exhibit, or c) request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.

6.  The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.

7.  For purposes of Appeal, the proposed amendment(s) a) will not be entered or b) will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: \_\_\_\_\_.

Claim(s) objected to: 5,46 and 55.

Claim(s) rejected: 1-4, 6-45 and 47-54.

Claim(s) withdrawn from consideration: \_\_\_\_\_.

8.  The proposed drawing correction filed on \_\_\_\_\_ is a)a) approved or b)b) disapproved by the Examiner.

9.  Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_.

10.  Other: \_\_\_\_\_.

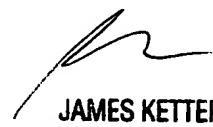
Continuation of 3. Applicant's reply has overcome the following rejection(s): and objections: The objection to claim 48 for the missing phrase is withdrawn; the objection to the drawings; the rejection of claims 1-6, 8-19 and 24-26 under 35 USC 103 over US Patent 5,824,485 in view of US Patent 5,958,672 is withdrawn; the rejection of claim 55 under 35 USC 112, first paragraph, is withdrawn; and the rejection of claims 1-25 and 39-41 under 35 USC 112, second paragraph, is withdrawn.

Continuation of 5. does NOT place the application in condition for allowance because: 1) With respect to the sequence requirement, Applicants have requested that the CRF, Sequence Amendment and statement that the CRF and Sequence Amendment are the same, be transferred from the parent application. However, only the CRF will be transferred, i.e., used to generate a CRF for the instant application. There is no provision either in the rules or in the administrative capacity of the USPTO to transfer the Sequence Amendment and the statement to another application. Applicants STILL MUST provide the Sequence Amendment and the statement.

(2) With respect to the rejection under 35 USC 102(e) over US Patent 5,824,485, Applicants argue, at the paragraph bridging pages 12 and 13 of the response, that the '485 patent teaches the "purposeful creation of novel activities or pathways by combinatorial techniques". However, it is not apparent that the cloning method generally disclosed in '485 falls outside the scope of the instant claims. Applicants argue that the DNA cloned in the instant invention is "derived from a mixture of uncultivated organisms to produce libraries that contain naturally occurring activities or gene clusters or pathways or genes as found in nature, without manipulation." However, it appears that the only manipulation required by '485 for many or most of its embodiments involves only cloning DNA from a mixture of organisms. Thus, it is not apparent that there is a distinction between the instant claims and the cited art. Applicants argue at page 13, at the full paragraph, that '485 does not teach each and every element of the claimed invention. However, it would appear that the opposite situation is true--that the instant claims actually encompass the teachings of '485. That more limitations are taught by '485 than are set forth in the claims does not distinguish the claimed invention over that of '485, in view of the open claim language. At the subsequent paragraphs, Applicants argue that the exhibits provide a definition of "combinatorial" that show that '485, in using this term, is distinct from the claimed invention. However, '485 provides its own definition of "combinatorial natural pathway expression library", at column 6, lines 14-27. Coupled with the teachings at the paragraph bridging columns 25 and 26, wherin it is taught that "[i]f the native function and organization of the transferred DNA fragment is maintained in the host organism, the genes of the donor organism may be coordinately expressed." Thus, maintaining the transferred DNA in its natural configuration is taught, rendering moot whatever definition of "combinatorial" the art might provide. At the paragraph bridging pages 14 and 15 of their response, Applicants argue that the priority application for '485 refers to "design" of libraries, and that the instant invention does not employ design of the libraries. However, it is not clear how this term raises a distinction between the claimed invention and '485. Of course there must be "design" in Applicant's invention; otherwise, it would represent a product of nature. That design is the very cloning of the fragments into a library--which is also taught by '485. At the first full paragraph at page 15, Applicants argue that the Examiner acknowledged "that Thomspn is silent regarding inserting a polynucleotide into the clones, wherein the polynucleotide encodes a bioactive substrate that undergoes a fluorescence change that is detected in the presence of an enzymatic bioactivity or biomolecule in the clone." However, this would appear to represent a misinterpretation of the point the previous Examiner was making. Claim 28, as presently drafted, recites that the polynucleotide encoding the enzyme is the substrate for an (?) enzyme. This limitation, while apparently unintentional, technically overcame the art for Claim 28, as no teaching of using the DNA encoding the enzyme as a substrate for (another?) enzyme was set forth. [As a side note, claim 28 was indeed, intended by the Examiner. The amendments to claim 26 do not rectify this unintentional meaning of claim 28, as the text of claim 28 is not clearly as shown by Applicants in the amendment after final, filed 25 April 2003 (Amendment B). In the amendment filed 27 August 2002 (Amendment A), the marked-up copy differs from the clean copy as filed. The marked-up copy contains the language which sets the polynucleotide as the substrate. Applicants presumably would wish to clarify this by amending claim 28 BASED UPON THE MARKED-UP VERSION FROM AMENDMENT A. HOWEVER, unless persuasive arguments against this rejection were made at the same time, SUCH AMENDMENT WOULD REQUIRE THAT THIS REJECTION BE REINSTATED AGAINST CLAIM 28.] Thus, the newly added limitation to claim 26 does not overcome the teachings of '485.

(3) With respect to the two rejections under 35 USC 103, over '485 in view of Plovins et al. and Zhang et al., and over '485 in view of Tsien et al., Applicants are attacking the individual references, particularly the secondary references, for not teaching all of the limitation of the claims. However, the rejection is made under 35 USC 103, and as such, that which is not taught in the primary reference, '485, is taught by the combination of the teachings of '485 and the respective secondary references.

(4) With respect to the rejection of claim 28 under 35 USC 112, first paragraph, as noted above, the rejection was, indeed, meant to apply to claim 28. Furthermore, as noted above, there seems to be confusion as to the actual text of claim 28. It is understood by the Examiner that the text as found in the marked-up version of the claim in Amendment A, filed 27 August 2002, is the correct and official version of the claim. As such, the amendment to claim 26 does not remove the limitation in question from claim 28, and as such, the instant rejection must stand. As noted above, however, amendment of claim 28 to remove this rejection would force reinstatement of the rejection under 35 USC 102(e), and unless the rejection under 35 USC 102(e) were overcome.



JAMES KETTER  
PRIMARY EXAMINER